

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS String Seminar

Title : Progress on High-Energy String Collisions

INTERNATIONAL

- Speaker Sebastian Mizera (Institute for Advanced Study, USA)
- Date : Thursday, 28 November 2024
- 10:00 AM (IST) Time :
- Abstract : String theory offers a unique perspective on concrete questions about the nature of quantum gravity. I will review how such questions can be formulated in terms of the string theory S-matrix at high energies. Attempts to sharpen the S-matrix calculations reveal the need to revisit the very formulation of string perturbation theory in Lorentzian space-times. Mathematically, it relates to the open question of how to choose a compactification of the moduli space of punctured Riemann surfaces. I will review the recent progress in addressing such questions in the open and closed superstring sectors at one-loop level, resulting in concrete numerical predictions for high-energy string collisions.
- : Online Venue Zoom Link: https://icts-res-in.zoom.us/j/88092766911?pwd=R3ZrVk9yeW96ZmQ4ZG9KRzVhenRKZz09 Meeting ID: 880 9276 6911 Passcode: 232322